

# Walking to Wellness

Exercise for Physical and Emotional Health

## Facilitator Manual

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## Introduction

### **Purpose and Uses of *Walking to Wellness***

Most adults in the United States today do not spend enough time exercising to get optimal benefits. People with anxiety and depression symptoms tend to be even less active than people who do not experience these emotional symptoms. Although there is substantial scientific evidence showing that exercise can help manage anxiety and depression, there are few intervention materials that are especially designed to help people use exercise for emotional health. We hope the materials in *Walking to Wellness* will encourage more people to use exercise to help manage their emotional symptoms, as well as improve their physical health. This facilitator's manual includes current scientific information about exercise and mental health that can help you be well informed when you talk with your clients about this topic. In addition to the sections on scientific background and the theoretical framework for the interventions, the facilitator manual also includes descriptions of the intervention materials and suggestions for using them with individuals and groups.

The information and worksheets in *Walking to Wellness* are designed to be used as an adjunct to other interventions in primary care, mental health, and health promotion clinical settings for managing chronic conditions. *Walking to Wellness* can be used along with medication, psychotherapy, supportive counseling for persons seeking treatment for mental health symptoms, or for other wellness education. You can incorporate the *Walking to Wellness* tip sheets into individual counseling or groups that include other topics, such as nutrition or cognitive strategies for stress management. The materials can also be used for a group with a focus on exercise and physical activity promotion. This kind of group could be enriched by including a co-leader or presentation by an exercise professional who teaches the group members about safe and healthy exercise appropriate to their health conditions.

Suggestions for individual and group use are included in this manual.

### **Who Can Benefit from *Walking to Wellness*?**

Almost every adult can experience better physical and mental health if he or she engages in regular exercise. In this program we consider any physical activity that is done with the purpose of improving or maintaining health to be “exercise”.

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Exercise does not need to be strenuous. The kind of exercise we encourage should also not be painful. We especially recommend walking because walking is safe and available for almost everyone. Some people can use other kinds of exercise to achieve the goals of this program.

*Walking to Wellness* was designed to be used by adults experiencing mild to moderate stress, anxiety, and/or depression symptoms. The materials are written for someone who can walk for at least 10 minutes, but could be adapted for clients who need to start with very brief walks because of their health conditions. Some clients will prefer to use these materials on their own for self-help, perhaps because they will not have an opportunity to meet with you again. We believe many clients who are struggling with anxiety or depression symptoms will be more successful if they try the activities with a group of other participants or in the context of some kind of individual counseling with a facilitator or therapist. This collection of information and recommendations is not designed for persons who have moderately severe to severe symptoms or who have medical conditions that make increased physical activity or walking unsafe.

*Walking to Wellness* is not an exercise training program to be substituted for therapy provided by exercise or rehabilitation specialists. In a medical setting, it is appropriate to have a note from a participant's medical provider stating that it is safe for him or her to engage in light or moderate walking and whether there are any specific limitations to physical activity that you and the participant need to consider. In our clinics, we request a note from the participant's primary care provider. Primary care providers are usually very pleased to learn that participants are interested in starting a regular exercise program, and they can help reinforce and support participation and acknowledge progress.

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## Scientific Background

This section provides a very brief summary of results from scientific studies about exercise and interventions that can help people become and stay physically active. This information can help you understand and explain the rationale for the information in the *Walking to Wellness* collection of activities.

### *Exercise can help treat and prevent many common health problems.*

The benefits of exercise on physical health, including decreased risk of cardiovascular disease, stroke, type 2 diabetes, breast and colon cancer, and osteoporosis <sup>1</sup> are now widely recognized. Additional benefits for older adults include reduced risk of falls and protecting physical and cognitive function <sup>2-5</sup>. Many scientific reviews support the value of exercise as part of recovery plans for mental illness, treatment for depression, and improved quality of life in varied patient populations <sup>6-9</sup>. A Cochrane Database review of 39 controlled clinical trials <sup>10</sup>, a meta-analysis of studies that only included patients with clinically significant depression <sup>11</sup>, and a meta-analysis of 90 articles on depressive symptoms in patients with chronic illness <sup>12</sup> all concluded that aerobic exercise reduces depression symptoms. One study found that exercise could be as effective as adding a second anti-depressant medication and another found less relapse in patients with depression who exercised <sup>7</sup>. Although the smaller number of trials of exercise for anxiety outcomes requires more cautious conclusions <sup>13</sup>, controlled studies have shown that exercise reduces anxiety sensitivity and anxiety symptoms <sup>14 15</sup>. Exercise also reduces reactivity to stressful stimuli <sup>16</sup>. Positive effects of exercise on sleep in middle aged and older adults with insomnia were recently confirmed in a meta-analysis <sup>17</sup>. A carefully controlled trial found clear dose-response relationships between exercise and improvements in self-reported mental and physical quality of life (QoL) in sedentary women <sup>18</sup>. Reviews have also shown mental health (MH) benefits for cancer survivors <sup>19</sup> and for osteoarthritis pain <sup>20</sup>. Almost everyone could potentially receive multiple benefits from regular exercise.

### *Exercise benefits occur across a wide dose range achievable by almost all adults.*

Although the public health exercise recommendations for moderate intensity aerobic exercise for at least 10 minutes at a time, accumulating to at least 30

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minutes total on at least 5 days each week<sup>1</sup> also seem optimal for MH<sup>7;12;21;22</sup>, exercise of lower intensity and duration also has meaningful physical and mental health benefits. “Incidental” short bursts of moderate intensity activity of less than 10 minutes are positively associated with cardiorespiratory fitness<sup>23</sup>. Exercising for just 10 minutes improves vigor, fatigue, and overall mood<sup>24</sup>. Easy-paced regular walking protects cognition in aging women<sup>25</sup>. Exercise at only 50% of public health recommended levels produces significant improvement in QoL<sup>18</sup>; and even low levels of activity that do not meet recommended guidelines can prevent future depression<sup>26</sup>. Meeting public health guidelines is the ideal, but every step and every minute counts.

## *There are many biological and psychosocial mechanisms for exercise effects on MH.*

Potential physiologic mechanisms that are especially relevant to MH include favorable effects of exercise on inflammation, serotonin metabolism, the hypothalamic-pituitary-adrenal axis, autonomic nervous system, endogenous endorphins, and neurotropic factors that could augment learning and extinction processes in cognitive-behavioral therapy<sup>15;16</sup>. Another theoretical mechanism for exercise in MH is behavioral activation, increasing opportunities for positive interactions with the environment, and positive reinforcement<sup>27</sup>. Some of these effects take weeks or months, but most people want to feel better quickly. The *Ways to Wellness* exercise intervention is also informed by research yielding insights into why people “feel better” after a single bout of exercise, such as a brisk walk<sup>28;29</sup>. Studies examining the determinants of the increase in positive affect that can last several hours after exercising have identified that self-regulated pace and intensity (rather than prescribed) seem best; pleasant environments and cognitive processes during the experience also may be important<sup>28;30-33</sup>. Psychosocial mechanisms that can operate within a single exercise bout, as well as across time, include building self-efficacy and a sense of mastery from meeting a desired goal and persisting in spite of discomfort, inconvenience, and other challenges<sup>15</sup>.

## *People with depression, anxiety, stress and related mental health problems can initiate and maintain exercise.*

A recently published study<sup>34</sup> compared telephone care management that included a pedometer walking program to a control self-help book in depressed type 2 diabetes

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mellitus patients. After 12 months, counseling patients had lower depression, better QoL scores, and higher weekly step counts than controls. Another study compared two clinic exercise counseling sessions plus phone calls with usual care control in primary care patients with new episodes of depression<sup>35</sup>. This study has been criticized because many patients in both groups were prescribed antidepressants, and there were no differences in depression scores at follow-up<sup>7</sup>; however, 58% of exercise patients achieved exercise goals. These studies demonstrate that primary care patients with significant depression who receive motivational counseling can adopt and sustain increases in physical activity for at least a year.

## *Brief exercise interventions can produce clinically meaningful behavior change.*

Recent scientific reviews are consistent in finding that interventions using self-regulation behavioral strategies such as goal-setting and self-monitoring produce meaningful increases in physical activity for previously inactive or under-active adults<sup>2,36,37</sup>. Reviews specific to interventions that used pedometers also have found significant increases in steps per day and reduced body mass index compared with controls<sup>38</sup>. In addition to the many successful physical activity interventions that involve multiple sessions over several months<sup>36,37</sup>, a few trials have evaluated very brief interventions and found meaningful changes in physical activity and health. Obese and overweight patients with impaired glucose tolerance who received a single group session based on behavioral strategies and a step counter significantly increased their steps/day and improved glucose tolerance after 6 and 12 months<sup>39</sup>. Overweight and obese men who completed a motivational intervention worksheet as part of a mailed questionnaire significantly increased frequency of physical activity for at least 20 minutes at a time compared with controls who simply reported on their usual activity. Obese, overweight male Veterans with physical function limitations who had two exercise counseling sessions, 1 or 2 phone calls, and kept exercise diaries significantly increased walking and strength exercises, and were more likely to average at least 30 min/day of moderate activity at 10 months<sup>40</sup>. In another trial with primary care patients, 46% of aging men who received a single brief counseling by a nurse began walking at least 3 days/week, and 28% were still walking at least 1 day/week after 12 months<sup>41</sup>.



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## Theoretical Framework

The materials in *Walking to Wellness* are guided by several psychological theories of health behavior change, including the Theory of Planned Behavior (TBP) <sup>42</sup>, self-efficacy and social cognitive theory (SCT) <sup>43</sup> and recent reviews of emotional and behavioral self-regulation in relation to health promotion <sup>44-46</sup>. The TBP posits that when people have sufficient knowledge about the value of performing a behavior, believe that the behavior will be supported by their social environment and that they can successfully perform the behavior, they will form an *intention* to enact that behavior <sup>42</sup>. However, intentions are all too often insufficient to produce sustained action (as we all know from failed New Year's resolutions). Theorists have clarified that success depends on the important additional steps of *goal setting* and *goal striving*, the planning and execution of actions that lead to goal attainment and protect the goal from distractions and disruption <sup>45</sup>. Factors that support goal-setting include sufficient knowledge of the health value of the goal behavior, building positive emotion to overcoming defensiveness about previous failures, a goal consistent with one's values, reducing competition with other priorities, and engendering intrinsic motivation. Successful goal striving can be aided by choosing approach (versus avoidance) goals, establishing SMART (Specific, Measurable, Attainable, Realistic, and Timely) goals, and setting mastery (versus achievement) goals. SCT conceptualizes some of these ideas under self-efficacy, the person's perception or confidence about what one can actually do, and outcome expectancies, one's beliefs about the likely outcomes of the behavior <sup>43;44</sup>. For exercise, successful goal striving is predicted by behavioral processes from SCT, such as structuring the environment to support the goal, self-monitoring of progress, enlisting support, and rewards <sup>47;48</sup>. The materials in *Walking to Wellness* use these principles to support behavior change.

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## **Pedometers and Exercise Tracking Devices**

There are many kinds of personal health devices, including relatively low-tech pedometers and increasingly sophisticated electronic trackers, that connect with computers and smart phones. You may wonder if clients should have a pedometer or other exercise tracker as part of this program. Exercise trackers can be helpful in motivating people but they are not necessary for success in *Walking to Wellness*, which emphasizes personal goals and self-selected exercise intensity/effort for exercise. Simply measuring the duration of exercise in minutes and/or distance in blocks or mileage can work quite well for self-monitoring, and the only technology required is a clock and possibly an automobile odometer to measure the distance around the area for walking. Many people have used these methods successfully to monitor their exercise before the availability of higher technology devices. The following comments may help you decide whether to recommend using some kind a tracker to your clients.

On the positive side, tracking devices provide interesting and potentially useful feedback to clients. The newer technology and its associated internet connections can also help them connect with friends who are physically active through social media. Recording steps can help clients and facilitators objectively measure activity and determine if goals are being met. More advanced devices provide data that provide additional feedback, for example, on flights of stairs climbed (or equivalent). Many provide estimates of kilocalories expended through exercise, but, for many reasons, these estimates are very often unreliable. On the negative side, the automatic programming for commercially available devices is typically designed for very active and healthy young adults. The feedback produced by these devices may be set up to push your clients to greater effort than is appropriate for their health status. The automated reminders or built in sensors that detect fast versus slow walking, for example, may suggest to them that their slow walking is not enough for health benefit, when in fact it may be just right for them. Automated messages through computer and smart phone connections may also prompt clients to make social comparisons that can undermine the sense of mastery and confidence of less able or less motivated clients.

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## ***Walking to Wellness* Intervention Components**

The information in the next section summarizes the contents of the *Walking for Wellness* intervention materials, with suggestions for integrating into individual and group meetings with clients. An initial encounter with an individual will require about 30 minutes if you discuss the materials, but only a few minutes if you simply provide the workbook or selected materials with a recommendation to read and consider using them. Follow-up individual encounters can be in person or by telephone and may require only 5 to 15 minutes, but they can be much more detailed if the exercise assignments are being used to help integrate learning from other kinds of therapy. For group meetings, at least 50 minutes will probably allow enough time to discuss the information and allow interaction.

### **Week 1**

#### *Benefits of Exercise Tip Sheet and Work Sheet*

The first tip sheet, *Benefits of Exercise*, is designed to guide a conversation that helps clients appreciate how regular walking could be helpful to them. Specifying expected effects of exercise they value can help people build motivation to start an exercise program. In an individual meeting, allow at least 5-10 minutes to review the tip sheet and talk about which effects of exercise would be valued most by that client immediately and in the future. Encourage the client to write down at least two immediate and two long-term benefits; a worksheet is provided: *Walking to Wellness: Benefits for Me*. We suggest you specifically ask clients to consider what *emotional* benefits they hope to gain from exercise; at least one research study found that people who expected emotional benefits reported greater improvements in affect following an exercise session. In a group meeting, allow at least 10-20 minutes to review *Benefits of Exercise*. If there is time, you could ask participants if they have heard of other benefits of exercise not mentioned on the tip sheet. Ask clients to write down what they are thinking and then share with other group members what would be most important for them.

#### *Before Exercise Tip Sheet*

*Before Exercise* continues with building motivation. Review the points on the tip sheet and explain these might be helpful for the client to review when she or he

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doesn't feel like keeping the commitment to walk for wellness. After reviewing the suggestions on the tip sheet, you can ask the individual client or group members if they can think of additional ways to get motivated to exercise when they don't feel like doing it. Anticipating barriers and planning for solutions are important to all kinds of successful goal achievement.

## *During Exercise Tip Sheet*

In individual meetings, allow at least 5 minutes to discuss the basic guidelines of healthy exercise summarized in *During Exercise*. You will need more time if client is less familiar with this information or if there are special considerations such as pacing for chronic pain. Be sure to emphasize the safety points.

Especially for clients not familiar with mindfulness practices, *point out the potential emotional value of not using exercise time to try to solve or perseverate about problems*. This could be a very different approach from what many people have learned or practiced before and this may be *very important to achieving the most emotional benefits from exercise*.

In a group, allow at least 10 to 15 minutes for the discussion of health exercise guidelines. You might stimulate discussion by asking if anyone has heard the phrase “no pain, no gain” as advice for exercise. This can be an opening to discuss how exercising for personal wellness is different from exercise by athletes for competition and training to meet demands of military and occupational service.

## *Walking to Wellness Initial Action Plan Worksheet*

Encourage clients to visualize and develop a plan with very specific components and to record this plan using the *Initial Plan* form provided. In a group, having some members share their plans can stimulate ideas for other members and help to identify plans that are too vague.

## *Walking to Wellness Personal Log*

As clients get ready to start their first week of *Walking to Wellness*, encourage them to record their activities, successes as well as challenges, during the next week using the *Personal Log* worksheet. If they will be using activity trackers such as pedometers or other technology, information from these devices can also be recorded on the worksheets. Some clients may prefer to use digital logs offered

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on wellness websites or as part of smartphone apps, and you can decide if this is acceptable for the purposes of your work together.

If time permits before the encounter ends, consider a 10-minute walk with the client to practice the recommendations on the tip sheet during your initial meeting. Using a *Personal Log* form, note the date and record feeling states before exercise. Do not spend time talking about the reasons for feelings or try to change them. Then walk for least 10 minutes, including a 2-3 minute warm up, about 5-6 minutes of brisk walking if tolerated by the client, and then a 2-3 minute slowing down. You can talk during the walk but do not use the time to discuss difficult issues. Note that current research evidence suggests it will be best to walk at a pace that keeps affect in the positive feeling range. During vigorous exercise, physiological processes typically provide a time out from negative cognitive processes and emotions such as worry, sadness, or anger. During moderate exercise, such as walking, it may be necessary to gently but purposefully guide thoughts away from these concerns in order to get the most emotional benefit from the exercise. Many people who are successful in establishing and maintaining regular exercise choose to focus on environmental points of interest or non-painful body sensations such as breathing, listen to music, or engage in social conversations with a friend or family member.

After the walk, re-assess your feeling states. Again, do not try to analyze the feeling states, just observe them and record them, along with some information about the walk. The desired outcome is a more positive feeling state after exercising, but this will not always happen. If the feeling state doesn't improve, you can comment this is not unexpected. Keeping a log about exercise experiences can help each individual learn to exercise in ways that more reliably produce a positive change in feelings. Completing the first entry of the *Personal Log* after this walk with the client is a good model for encouraging completion after walking at home during the coming week.

In a group, you may need at least 15-20 minutes to do a brief walk together. You will also need a space that can accommodate the group and to be sure that the members are all physically capable of walking for at least 10 minutes. Ask group members to privately record their feeling states before you start, then model starting at a slower pace, easing into a brisk pace if appropriate for the group members, then slowing down before stopping. Ask group members to re-assess their feeling states. If there

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is time some may want to ask members to share if they noticed any changes. This can be a nice opportunity to reinforce positive changes reported by group members.

## Week 2

Encounters during Week 2 have several purposes. For individuals, these activities can easily be done by telephone and will typically require less than 10 minutes for most clients. Ask clients to review their *Personal Log* information with you to find out what they tried and their emotional responses to the exercise. As with any new intervention, you will be hoping to elicit reports of at least some success that you can reinforce and use as a platform for building new positive experiences. Research on self-management suggests that people who fail to initiate self-monitoring during the first couple of weeks in an intervention program are much less likely to have successful outcomes. For this reason, you will also be prepared to problem-solve with clients who did not initiate any walking or other physical activity for wellness, or who failed to record any of their reported activity, using clinical strategies you believe would be most effective, taking into account all aspects of the current situation. Some suggested responses to less than positive responses to early exercise experiences are discussed below.

If you are satisfied clients have at least started to engage in the recommended activities, you are ready to move on to Week 2 in *Walking to Wellness*.

### *After Exercise Tip Sheet*

So as not to overload clients in the initial encounter, the information in *After Exercise* is recommended for discussion in the second encounter (in person or by telephone). We also believe discussing the *After Exercise* tip sheet at this time could be more meaningful because clients will now have some (recent) experience with walking for wellness. Because of the variability in people's response to exercise, especially with beginners, facilitators should be prepared for both positive and negative reports. For clients who noticed increases in positive feeling states after at least some of their exercise, you will be able to reinforce their success and remind them to use the log to document what is working for them. For those who did not perceive any positive responses or disliked the sensations of exercise, and who perceive this as a potential barrier to continuing to walk for exercise, problem-solving can include reviewing all the tips for *Before Exercise* and *During Exercise*.

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People can have very different responses to exercise and some don't enjoy it very much. Starting exercise for wellness can be especially challenging at lower levels of fitness when movement may be awkward and uncomfortable and people have not yet become accustomed to the natural physiological sensations of warming up, reaching a sustainable level of rhythmic movement, and then cooling down. For clients experiencing pain, a less demanding pace or effort may be needed; remind them to follow their healthcare providers' recommendations for pain management. If pain is moderate-severe and continues, more consultation may be required.

For those who found the walking just another chore to be completed or even unpleasant, it may be helpful to review their valued outcomes of doing the exercise. Discuss with them whether these outcomes make it worthwhile to continue doing the activity even if it is not immediately enjoyable? Also problem-solve for the possibility that clients are using some or all of their exercise time to ruminate on unhappy thoughts or problems they are struggling to solve. You can explain this is like poisoning the well of potential emotional benefits. Point out the tip in *During Exercise* to relax the mind while working the body. Some clients may need to consider stronger distraction or mindfulness strategies. This may be an important difference between exercise for emotional wellness as compared with exercise for physical fitness improvement.

In a group meeting, allow at least 20-30 minutes for discussion of efforts and experiences that members are willing to share. A second group walk provides another opportunity to model and practice the skills of self-assessment of feelings before the walk, warming up to a moderate effort, maintaining the effort for a few minutes, and then slowing or cooling down before stopping and re-assessing the feeling state. It can be helpful to review markers of moderate effort, including a feeling of a bit of breathlessness, possibly feeling some perspiration, a perception of effort being "moderately hard" and being able to hold a conversation but unable to sing.

## *Weekly Plan*

After reviewing the events and reactions from the previous week, encourage identification of specific learning experiences as prompted on the *Weekly Plan* form, then writing down a new plan for the next week. The sections of this worksheet prompt clients to think about what they want to achieve, reviewing what they have

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learned and specifying how they plan to achieve their goal. They may record a goal that is an action statement, such as walking for wellness at least 4 days during the week, or they might write down a longer term objective, such as to practice walking for wellness and bringing thoughts back to the moment if starting to think about upsetting things. The action plan section prompts making plans that are specific and achievable. Providing clients with multiple copies of the *Weekly Plan* and *Personal Log* worksheets can help facilitate self-monitoring, which is extremely valuable for the success of this and other wellness interventions.

## **Weeks 3 and 4**

Encounters for Weeks 3 and 4 may be by telephone or in person. For clients who have initiated at least some walking for wellness and kept personal logs, there may be enough information to begin assessing patterns of adherence and response to the exercise. The personal logs will provide information for discussion in individual or group meetings. What have they noticed? Client- or patient-centered conversations based on the personal logs can lead to discussions of not only the exercise, but also other events in their lives. Decisions to follow up on the many possible topics beyond the exercise will depend on the purpose of the encounters and the role of the walking promotion in the context of other treatment. You may want to ask clients if they have tried taking a walk specifically for the purpose of improving their mood or as a substitute for less desirable coping behaviors that they want to replace.

Many other resources (see *Websites for Health, Exercise, and Physical Activity Information* for example) provide suggestions about motivation for exercise and managing challenges to adherence to exercise intervention goals. At this time you can assess how well individual or group clients are doing with the *Walking to Wellness* materials. Clients who report they have not been able to initiate any walking or who have recorded only one or two days of activities in their personal logs after two weeks probably need alternative or more intensive strategies for promoting exercise and/or for managing their emotional symptoms.

### *Mindful Walking*

By Week 4, many clients may be ready to try something different and we incorporated the *Mindful Walking* activity guide at this point in the workbook.



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However, you can introduce it at any time you feel it might be helpful to your clients. We don't recommend trying Mindful Walking as a group, but you can incorporate some sitting and standing mindfulness strategies into the group session at Week 3 or 4 to introduce these experiences to clients. Having a guided experience in a meeting with their therapist or counselor may encourage clients to try the *Mindful Walking* on their own.

Although the physiological stress of vigorous exercise distracts people from distressful thoughts and emotion, the moderate intensity exercise that is likely to be safe and feasible for most adults does not automatically shut down those negative processes. The *Walking to Wellness* intervention materials are designed not only help participants to set exercise time and intensity goals that are consistent with optimal mood response, but also teach them to gently redirect negative thoughts that emerge during exercise and to notice the positive changes in mood that often follow a bout of moderate exercise. We also emphasize that exercising can help build self-efficacy that will help them become energized to attempt other goals and strengthen their resilience against life's challenges.

Exercise must be continued indefinitely to get the benefits. Although the materials in *Walking to Wellness* have a brief 4-week framework to minimize demands on facilitators, you may want to change this time frame to accommodate the structure of other therapy or schedule of clinical encounters. The *Walking to Wellness Monthly Plan* provides prompts for setting goals and making specific plans for the next 4 more weeks and can be duplicated indefinitely for those clients who find it helpful to continue using the worksheets.

After working through the *Walking to Wellness* materials, you can transition to a focus on new wellness topics, refer clients to other wellness programs that will support their personal goals, or help them plan transitions to community based activities.

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